# GLACIER NATIONAL PARK HIGH COUNTRY CITIZEN SCIENCE PIKA SURVEY FORM (2013)

| ***Date:** | **Observer (s):** (circle person who conducted search) | | **Phone/Email:** |
|---|---|---|---|
| *Citizen Science Hours (includes driving, hiking & survey time)* | | **Time at start of day:** | **Time at end of day:** |
| **Trail Name:** | | **Number of miles hiked:** | **Site Name (#**on marker and/or map**):** If Site marker is not found, enter GPS coordinates of where you began your survey. |
| **Arrival time at site:** | **Begin time for traverse search:** | **End time for traverse search:** | **Departure time from site:** |

**TIME AND TYPE OF PIKA DETECTION (***Please write "none" if no pikas or sign observed during survey*.)

**PIKA DETECTION TYPES** = Pika Sighting, Pika Call, Fresh Haypile, Old Haypile, Fresh Scat, Old Scat

*Fresh hay/scat contains visible chlorophyll (green tint) and some plasticity when squeezed. Old hay/scat is more brittle, contains little (hay) or no (scat) visible chlorophyll.*

*For the number of pellets, approximate into the following categories: <5, 5-10, 11-50, 51-100, >100

| | Time of detection | Detection type (may list multiples per location) | Distance (m) from site center | If fresh scat, # of pellets* | If old scat, # of pellets* | Verification photo (Y/N) | Comments (Other wildlife and/or sign, uncertain detections, etc.) |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |

| Estimate % cover for each ground cover type (0, <1, 1-5, 5-25, 25-50, 50-75, 75-95, 95-100, or 100%): | Rock: | Bare ground (dirt, mineral soil, plant debris/ sticks): | Grass: | Forb (non-woody plants): | Shrub: | Tree: |
|---|---|---|---|---|---|---|

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| *Please rate the following for this site on a scale of 1-5 (1 very easy; 5 very difficult):* | | | | | | |
|---|---|---|---|---|---|---|
| Ability to reach the talus field | 1 | 2 | 3 | 4 | 5 | NA |
| Ability to traverse talus | 1 | 2 | 3 | 4 | 5 | NA |
| Ability to navigate to/locate the site marker | 1 | 2 | 3 | 4 | 5 | NA |
| Ability to follow/understand the instructions and survey methods | 1 | 2 | 3 | 4 | 5 | NA |
| Ability to detect and identify pikas | 1 | 2 | 3 | 4 | 5 | NA |
| Ability to see under rocks completely | 1 | 2 | 3 | 4 | 5 | NA |
| Ability to detect and recognize pika scat | 1 | 2 | 3 | 4 | 5 | NA |
| Ability to detect and recognize pika haypiles | 1 | 2 | 3 | 4 | 5 | NA |
| Ability to age pika haypiles and scat | 1 | 2 | 3 | 4 | 5 | NA |
| Ability to complete search in allotted time | 1 | 2 | 3 | 4 | 5 | NA |
| Ability to estimate vegetation cover | 1 | 2 | 3 | 4 | 5 | NA |

Approx. time to locate marker from trail (minutes):

Why did you select this site (check all that apply):
___ Scenic location
___ New area of park
___ Optimal hiking distance/strenuousness
___ Optimal driving time/convenience
___ Safety consideration
Other: _____

If last survey of the day, how many sites did you survey today: ____ sites

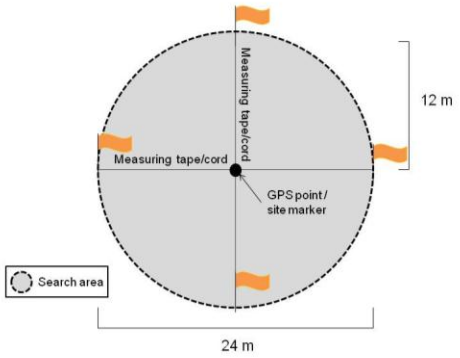
Notes, comments, or general feedback:

## PIKA SURVEY PROCEDURES

**Survey equipment:** Measuring tape/cord, pin flags, and GPS unit.
**Recommended:** Leather gloves, camera, flashlight, and watch.

***Surveys should not be conducted in inclement weather such as rain, snow, high winds***

1. Navigate to survey site using route map, GPS point location and photo of reference on trail. Once close (~10 m) begin looking for the metal site marker and/or rock cairn. Once you find the site marker*, enter the site number as "Site Name" on the data form.*If you cannot find the site marker after 15 minutes, conduct your survey from the closest location (within 10 feet according to your GPS unit), **record the GPS coordinates and notify us.**
2. Use the measuring tape or cord to measure out 12-m to four edges of the plot, leaving a pin flag at each edge (see right). This will help you establish/visualize the search area. Note: Sometimes the plot will extend beyond the talus but you should still use same site center and plot edges. In these cases, all rock in the plot should be searched and all ground cover types in the plot, even if beyond the talus, incorporated in the cover estimates.
3. Sit quietly for 5 minutes, looking and listening for pikas. Record any detection of pikas within the plot as well as the approximate distance of the detection from the marker. Document all pikas seen or heard outside of the plot on the table below. Note type of observation in comments.




4. Begin searching the entire circular plot for the pika sign types (noting the start time on the form). You many record multiple detections in one row if those were found at the same location (e.g., fresh haypile and fresh scat in the same rock crevice). Search the site for a minimum of 15 minutes and a maximum of 30 minutes, ensuring to look in every possible crack and crevice through the search area. Record the time you completed the search.
5. Estimate the percent cover for each ground cover type and complete survey questionnaire (above).
6. Return survey forms ASAP by fax (406) 888-7903, or email glac_citizen_science@nps.gov, or mail GNP-CCRLC, PO Box 128, West Glacier, MT 59936

**OTHER PIKAS SEEN DURING HIKE (OUTSIDE OF SURVEY PERIODS OR SURVEY PLOT):**

| Time at detection | Detection type (may list multiple types per location) | UTM's (NAD 83) Easting | UTM's (NAD 83) Northing | Specific location (mountain, aspect, trail mileage, etc.) | Comments |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |